

Remarks

In the office Action dated December 1, 2005, the specification was objected to for incorporation of a foreign application and claims 1-13 were objected because of informalities. Claims 1, 3, and 5-13 were rejected under 35 U.S.C. §102(b) as being anticipated by Neuschotz (US 3,035,797). In addition, claims 1, 2, 6-11, and 13-14 were rejected under 35 U.S.C. §102(b) as being anticipated by Shakesby (GB 552,722). Claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over Neuschotz.

In this response, claim 1 has been amended. Upon entry of the amendments claims 1-14 will be pending.

Reconsideration of the application based on the following is respectfully requested.

Specification Objections:

The specification was objected to for incorporation of a foreign application by reference.

Applicants have amended paragraph [0001] of the specification to remove the incorporation by reference.

Withdrawal of the objections to the specification is respectfully requested.

Objections to the Claims:

Claims 1-13 were objected because of informalities. Specifically, the Examiner has objected to the phrase “telescopically and slidably inserted into” in claim 1 and to the term “first” in claim 11, line 2.

Applicants have amended claim 1 to replace the phrase “telescopically and slidably inserted into” with the phrase “telescopically slidable within”. Applicants respectfully submit that the language of amended claim 1 is sufficiently clear, particularly in light of the specification, for example, at paragraphs [0023] and [0025] and Fig. 2. Applicants furthermore submit that the amendment to claim 1 merely clarifies the meaning without changing the scope of the claim and therefore does not require any additional search.

With regard to claim 11, Applicants respectfully submit that the term “first” is correct. Claim 2 recites that the first tubular connecting element projects into an inside of the second flexible tank. Claim 11 recites that the latching device is arranged at the first tubular connecting

element. Applicants respectfully submit that the embodiment described in the specification and shown in Fig. 2 is consistent with the language of claim 1. For example, Fig. 2, shows first tubular connecting element 8 projecting into the inside of second tank 2 and a latching member being arranged at the first tubular connecting member 8 (the form of spring 16 mounted on the inside portion of member 8).

Withdrawal of the objections to claims 1-13 is respectfully requested.

Rejection under 35 U.S.C. §102(b) over Neuschotz:

Claims 1, 3, and 5-13 were rejected under 35 U.S.C. §102(b) as being anticipated by Neuschotz (US 3,035,797).

Neuschotz describes a detachable connector for a fuel tank or other fluid containing cell of an aircraft. The detachable connector includes a tubular fluid tight interconnector 14 that extends between a pair of fuel cells 11. Interconnector 14 is detachably connected at each end to cells 11 using a pair of connecting assemblies 17, each including connecting ring 20, rigidly attached to (or integral with) interconnector 14 and a second ring 21 permanently attached to cell 11. Rings 20 and 21 are held together using a series of circularly spaced latches 22. Column lines 30-69 and Figs. 1 and 2.

Independent claim 1 recites a connection arrangement for detachably connecting a first flexible tank and a second flexible tank of an aircraft having a first tubular member attached to a first tank and a second tubular member attached to a second tank, and:

... one of the first and the second tubular connecting elements being telescopically slidable within the other of the first and second tubular connecting elements and being detachably connected to the other of the first and second tubular connecting elements by the latching device. . .

Applicants respectfully submit that Neuschotz does not disclose first and second tubular connecting elements, wherein each tubular connecting element is attached to the respective tank and wherein one is telescopically slidable within the other. A person of ordinary skill in the art would understand that a tubular element is telescopically slidable within another tubular element when a surface of the first element slides along a surface of the second element when the two are axially moved relative to one another.

The Examiner has responded to Applicants previous arguments by asserting that one element of Neuschotz "is slid into the other", and therefore is telescopically arranged within the other. Applicants disagree. Neuschotz discloses a connection arrangement that includes a frusto-conically shaped seal surface 29 of interconnector 14 centered about the main axis 30 that mates with a frusto-conical seat surface 30 on ring 21. See column 3, lines 8-13 and Fig. 2. The mating arrangement between the two frusto-conically shaped surfaces 29, 30 is not "a telescopically sliding" relationship, but rather an abutting or seating relationship. When interconnector 14 is detached from ring 21 and moved away axially from ring 20, the abutting frusto-conical surfaces separate from each other without any relative sliding of surfaces 29 and 30. Thus, the surfaces 29 and 30 do not slide with respect to each other in a telescopic manner. By contrast, the mating surfaces of elements 8 and 18 shown in Fig. 2 of the present application necessarily slide relative to one another when the latching device opened and are thus clearly telescopically slidable relative to each other.

Withdrawal of the rejections to claims 1, 3, and 5-13 under 35 U.S.C. §102(b) as being anticipated by Neuschotz is respectfully requested.

Rejection under 35 U.S.C. §102(b) over Shakesby:

Claims 1, 2, 6-11, and 13-14 were rejected under 35 U.S.C. §102(b) as being anticipated by Shakesby (GB 552,722).

Shakesby describes improvements relating to flexible or semi-rigid fuel containers for aircraft including connecting means for joining the interiors of a plurality of such containers. The tubular member includes a metal tube 7 with longitudinal incisions 8 to provide a splaying effect and an annular outwardly extending flange 9 provided with perforations to permit the member to be bolted to the interior container wall. Page 1, lines 76-81. A pipe 4 is inserted through the tubular member 7 by means of a clamp 13 fitted with an adjustment nut 14. Page 1, lines 87-91 and Fig. 2.

Independent claims 1 and 14 of the present invention recite a connection arrangement for detachably connecting a first flexible tank and a second flexible tank of an aircraft, that includes a latching device, a first tubular connecting element attached to the first flexible tank, and a second tubular connecting element attached to the second flexible tank. Claims 1 and 14 each also include the feature that "in a connected state of the connecting elements . . . the latching

device is disposed inside one of the first and second flexible tanks so as to be *actuatable from outside the respective flexible tank through said respective flexible tank.*" Emphasis added.

Applicants respectfully submit that the Shakesby does not describe at least the feature of a latching device that is actuatable "from outside" one of the tanks and "through" the respective flexible tank. The structure identified by the Examiner as corresponding to the latching device of claims 1 and 14 is clamp 13 and nut 14. Those elements are nowhere described as being actuatable from outside one of the flexible tanks 1 and 2 and through the respective flexible tank. In fact, actuating the clamp 13 via the adjusting nut 14 would be impossible through either of the semi-rigid tanks 1 and 2 of Shakesby. The purported advantage of the connection means described in Shakesby has nothing to do with actuation of the latching device, (indeed the actuation of clamp 13 and 14 is nowhere described), but instead with ensuring a leakproof connection between the container wall and the pipe. Page 1, lines 17-25.

Withdrawal of the rejections to claims 1, 2, 6-11, and 13-14 under 35 U.S.C. §102(b) as being anticipated by Shakesby is respectfully requested.

Rejections under 35 U.S.C. §103(a):

Claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over Neuschotz. Claim 4 depends from claim 1 and includes all of its elements.

Applicants respectfully submit that, in addition to not describing the features of a first tubular connecting element telescopically slidable within a second tubular connecting element, Neuschotz also does not suggest those features. As described above, the mating relationship between interconnector 14 and the rings 21 is a conical abutment or seating connection and not a slidable telescopic relationship.

There is no suggestion for replacing the conical abutment connection with a sliding telescopic insertion connection. Indeed, the inventive features of a telescopic sliding relationship between the two connecting members enables the realization of important advantages not recognized in Neuschotz. First, a telescopic insertion connection saves space because it allows for significantly more axial overlap of the connecting elements than a conical abutment connection. Second, because of the space saved by the telescopic insertion connection, both connecting elements can be elongated tubular elements without requiring more space for the connection. Third, the telescopic insertion and the elongated enables a single, robust latching

mechanism to be used between two tanks. Neuschotz requires two detachable connections between each pair of tanks (at each end of interconnector 14), thus requiring two coupling operations for connecting two tanks together. There is no suggestion within Neuschotz for a telescopically slidable coupling of two elongated connecting elements that would enable a single coupling operation for connecting two tanks.

Withdrawal of the rejection to claim 4 under 35 U.S.C. §103 is respectfully requested.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,

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